NWS FORM E-5 (11-88) (PRES. BY WSOM E-41)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) **WFO Jackson, Mississippi**
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR: MONTH: **March** YEAR: **2003**
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE **Alan Gerard, MIC** **In Charge of HSA** DATE **April 17th , 2003**

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)

Synopsis...

The wet-dry seesaw continues...much below normal rainfall in January to a much above normal pattern in February...and now in March a mostly below normal month for rainfall. The el Niño pattern so prevalent for most of the Fall and Winter has begun to diminish. During the month, a series of fairly progressive cold fronts pushed through during the month. Rainfall amounts were not very impressive for any of these fronts with only isolated heavy amounts occurring early in the month in southern sections of Mississippi and around mid month over eastern sections of Mississippi.

From the 3rd to the 6th, a warm front across the northern Gulf and an approaching cold front produced from .25 to near 2.50 inches over the Hydrologic Service Area. The heaviest rainfall occurred over southern sections of Mississippi as the cold front approached. The 24 hour rainfall ending at 7am on the 7th was 2.91 inches at Hattiesburg, MS.

Another cold front pushed through the area on the 9th and 10th, rainfall amounts were less than .10 inches over southern sections of Mississippi while no rainfall occurred elsewhere.

A cold front pushing through on the 13th and 14th kicked off showers and thunderstorms. Rainfall amounts ranged from .10 to around 3 inches over the area. Some of the heaviest rainfall occurred in east central Mississippi where rainfall amounts exceed 4.12 inches at Collinsville, MS and 2.16 inches at Topton, MS during this time period.

From the 16th to the 18th, a low pressure area developed on the Texas coast and moved across southern Louisiana and Mississippi. Rainfall reports totals for these days ranged from .25 to 2.00 inches. A weak front came through the area on the 19th and 20th with little or no rainfall associated with it.

Strong storms developed ahead of cold front as it pushed through Louisiana and Mississippi on the 26th. Rainfall amounts were relatively light, amounts ranged from .10 to .50 inches.

The final cold front of the month pushed through the area from the 28th into the 29th. Rainfall less than .50 inches was reported. This front ushered in the coldest weather of the month.

River and Soil Conditions...

Soil moisture conditions began the month well above normal. Soil moisture conditions by the end of the month had returned to near normal; however, Soil moisture conditions averaged of the last 12 months ending March 31st were almost 70 percent above normal for the long term. Most flooding in Mississippi and northeast Louisiana during the month was the result of heavy rainfall in late February. Minor flooding was generated in the extreme upper Pearl River basin due to rainfall late in the month. The same was true for the Big Black River basin where minor flooding was observed in the upper basin late in the month. Minor flooding occurred on the Yalobusha river around mid month.

With normal rainfall expected over the next several months and near normal soil moisture conditions, flood potential for HSA rivers should remain near normal with the exception of the Pearl River Basin where above normal conditions exists. See the March E-3 report for information on flood crests.

Rainfall for the month of February...

RIVER BASIN	RAINFALL	DEPARTURE FROM NORMS
Southeast Arkansas (Chicot & Ashley counties)	2.00 to 2.25 inches	Much below normal.
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	2.00 to 5.25 inches northern sections 3.50 to 4.25 inches central sections 4.50 to 6.00 inches southern section	Below to much below normal. Much below normal. Below to near normal.
Lower Yazoo	1.25 to 2.50 inches	Much below normal.
Big Black	1.75 to 3.75 inches upper section 2.25 to 4.00 inches lower and middle sections	Much below normal. Much below normal.
Homochitto/ Bayou Pierre	1.25 to 5.00 inches	Below to much below normal.
Pearl(abv Jackson)	2.75 to 4.00 inches	Much below normal.
Pearl(Blo Jackson)	2.00 to 3.75 inches	Much below normal.

Pascagoula	*2.75 to 7.00 inches over the Leaf basin.* *3.50 to 5.75 inches over the Black Creek basin.* *2.00 to 6.50 inches over the Chickasawhay*	*Much below normal except for near normal in the Hattiesburg area.* *Much below in upper basin to near normal at Brooklyn.* *Much below normal except near normal north of Meridian.*
Tombigbee tributaries in the JAN HSA	*3.25 to 5.75 inches*	*Much below normal except for near normal conditions around Columbus.*

The heaviest rainfall amounts in the HSA for the month were: 6.97 inches at Hattiesburg, MS; 6.51 inches at Collinsville, MS; 6.12 inches at Jonesville L/D, LA; 5.72 inches at Purvis, MS; 5.69 inches at Tibbee, MS; 5.33 inches at Sondheimer, LA; 5.18 inches at Natchez, MS; 4.86 inches at Shubuta, MS.

Here at the Jackson WFO, the March monthly rainfall was 4.06 inches, which was 1.68 inches above normal. We have had 14.48 inches of rainfall through the end of March which was 1.43 inches above normal.

At the Meridian Airport, the March monthly rainfall was 3.71 inches, which was 3.22 inches below normal. Meridian had received 12.08 inches through the end of March which was 6.12 inches below normal.

Mississippi River...

The Mississippi River from Arkansas City, AR to Greenville, MS crested around the 7th well above seasonal norms; however, by mid month, the river had receded below seasonal norms. From Vicksburg, MS to Natchez, MS the river crested between the 8th and 10th well above seasonal norms; however by the late in the month, this section of the river had also receded below seasonal norms.

The provisional high and low stages for March are listed below:

Location	*High Stage(ft)*	*Date*	*Low Stage(ft)*	*Date*
Arkansas City, AR	*32.00*	*03/07*	*19.74*	*03/31*
Greenville, MS	*43.71*	*03/07*	*31.57*	*03/31*
Vicksburg, MS	*38.90*	*03/08*	*26.70*	*03/31*
Natchez,MS	*46.68*	*03/09*	*35.12*	*03/31*

Products issued...

Total Flood Warning products issued: 3
Total Flood Statement products issued: 65
Daily Rainfall Products (RRA'S) issued 31
Daily River Forecast Products (RVS'S) issued: 32
Daily River Stage products (RVA'S) issued 31

Marty V. Pope
Service Hydrologist

Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USCE Mobile District
USCE Vicksburg District
USCE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
LMRFC
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District